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School of Computer Science and Engineering
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A Pipelined Educational Simulator

for the ARM Processor

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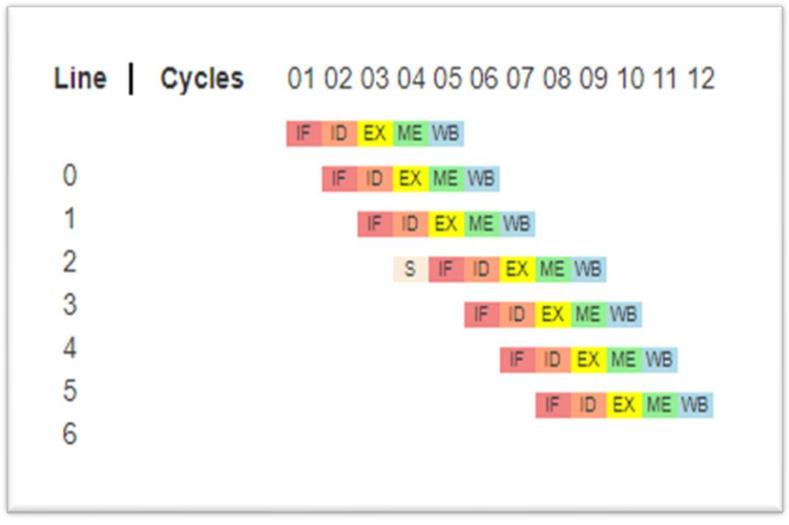

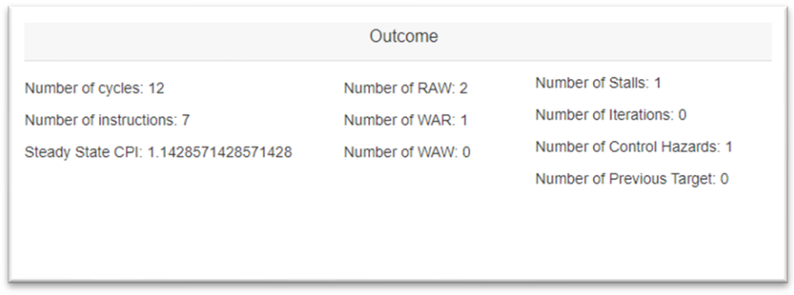

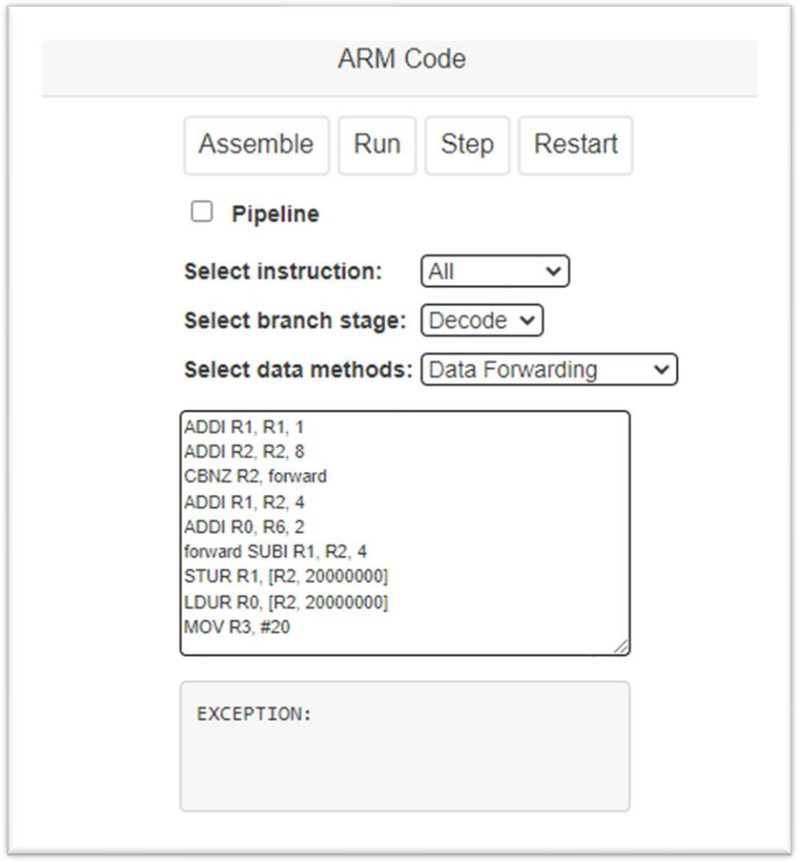

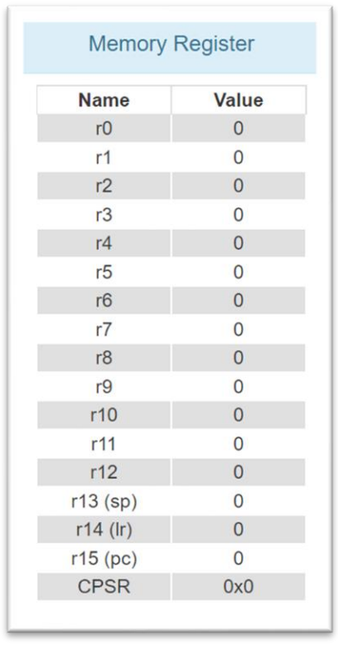

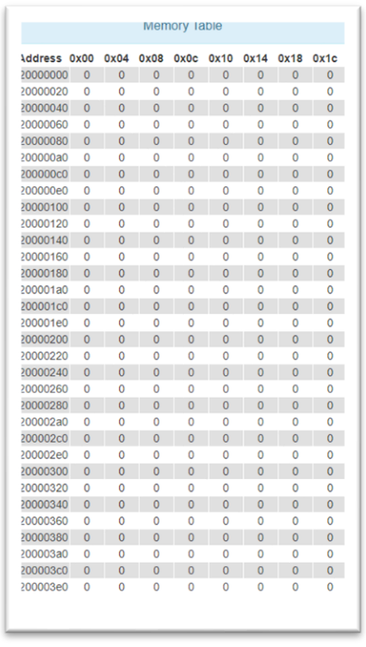

Introduction:

It is an educational simulator that can be an interventive tool for training and a diagnostic tool for analysis and processes. Students studying Advanced Computer Architecture can use the simulator to learn ARM architecture and explore the subject with ease.

Purpose:

To develop an educational simulator tool to display a pipelined ARM processor. It will assemble ARM instructions and display ARM pipeline and memory registers.

Problem:

There are many simulators available on the Internet related to ARM Architecture. However, some have lesser visual aids to show the pipelined cycles of the RISC architecture. Furthermore, some have limited features for learning Advanced Computer Architecture.

Solution:

To create a web application to act as an educational simulator to enable students to have fun learning Advanced Computer Architecture. The software stack used includes HTML, CSS, C#, and JavaScript.

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